

WHAT IS CLAIMED IS:

1. A method of manufacturing a nonreciprocal circuit device comprising a metal case containing central conductors, a ferrite core arranged near the central conductors, and a permanent magnet for applying a static magnetic field to the ferrite core, the method comprising marking information onto the metal case by irradiating the metal case with a laser beam.

2. The method of manufacturing a nonreciprocal circuit device according to Claim 1, further comprising heating the entire nonreciprocal circuit device after the information has been marked onto the metal case.

3. The method of manufacturing a nonreciprocal circuit device according to Claim 2, further comprising magnetizing or demagnetizing the permanent magnet to adjust its magnetic force prior to the heating step.

4. The method of manufacturing a nonreciprocal circuit device according to Claim 2, wherein the heating step both removes stains caused by the laser marking and thermally demagnetizes the permanent magnet.

5. The method of manufacturing a nonreciprocal circuit device according to Claim 2, wherein the heating temperature in the heating step is set between 110° and 210°C.

6. The method of manufacturing a nonreciprocal circuit device according to Claim 2, further comprising applying solder paste to portions where the components comprising the nonreciprocal circuit device are bonded
5 with each other, prior to the heating step.

7. The method of manufacturing a nonreciprocal circuit device according to Claim 6, wherein the heating temperature in the heating step is set between 210° and 310°C.

8. The method of manufacturing a nonreciprocal circuit device according to Claim 1, wherein the metal case comprises an upper yoke and a lower yoke and the laser marking is performed onto the upper yoke before the
5 upper and lower yokes are bonded with each other.

9. The method of manufacturing a nonreciprocal circuit device according to Claim 1, wherein the laser marking is performed by continuously irradiating a laser beam onto the metal case.

10. The method of manufacturing a nonreciprocal circuit device according to Claim 1, wherein the laser marking is performed by irradiating the metal case with a pulsed laser beam.

11. The method of manufacturing a nonreciprocal circuit device according to Claim 1, wherein the laser beam has a wavelength of 10 μm or less.

12. The method of manufacturing a nonreciprocal circuit device according to Claim 1, wherein the used laser is a YAG laser or a YVO_4 laser.

13. A nonreciprocal circuit device comprising:
central conductors;
a ferrite core arranged near the central conductors;
a permanent magnet for applying a static magnetic
5 field to the ferrite core; and

a metal case containing the central conductors, the ferrite core, and the permanent magnet;

wherein a coating layer including a silver layer is formed on a surface of the metal case to enable the
10 silver layer to be marked with a laser beam.

14. The nonreciprocal circuit device according to Claim 13, further comprising a layer formed of nickel or copper arranged under the silver layer.

15. The nonreciprocal circuit device according to Claim 13, wherein the entire thickness of the coating layer is 3 μm or more.

16. The nonreciprocal circuit device according to Claim 13, further comprising a nickel layer formed on the silver layer.

17. A communication apparatus comprising the nonreciprocal circuit device according to Claim 13.

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